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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,212	02/17/2004	CHUNG-CHE YU	11987-US-PA	2211
31561	7590	05/18/2006	EXAMINER	
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE			VO, TUYET THI	
7 FLOOR-1, NO. 100			ART UNIT	
ROOSEVELT ROAD, SECTION 2			PAPER NUMBER	
TAIPEI, 100			2821	
TAIWAN			DATE MAILED: 05/18/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/708,212

Applicant(s)

YU ET AL.

Examiner

Tuyet Vo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 4, 5 and 7 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Fig. 110

DETAILED ACTION

Remarks

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action filed April 28, 2006 is persuasive and, therefore, the finality of that action is withdrawn. Withdrawal of the restriction is not warranty because a technique to vary "duty cycle" is different to a technique to vary "frequency" of a control pulse signal even though both techniques would provide to a similar result. Claims 1-3 and 8 are still pending and being rejected under a new ground rejection as follow.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-3 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

4. Claim 1, line 6-7, recitation of "a duty cycle of the illumination control pulse signal varies with time within a predetermined of time" is not fully and clearly described in the specification. What does a circuit generate the control pulse signal in a varying time manner.

5. Claims 2 and 3 are rejected due to their virtual dependencies on the defected claim 1.

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6. Claim 8, line 6-7, recitation of “a phase shift, a frequency, and a duty cycle of the illumination control pulse signal varies **with time simultaneously**” is not described in the original/substituted specification. There is no support in term of circuitry to carry out for each feature such as varying frequency, duty cycle and shifting the phase of the control pulse signal and utilize the variation of each of frequency, duty cycle and phase to adjust the light’s intensity.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. For the best understood, claims 1 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Xu et al. (US Pub. 2003/0085749), hereinafter Xu.

Xu discloses a pulse width modulation illumination control circuit (Figs. 7-10) for controlling the illumination of light emitting diodes (24, [0028]), comprising:

an illumination control pulse-generating unit (34), for receiving an illumination signal as a feedback signal (A, marked by examiner) and generating an illumination control pulse signal (B, marked by examiner) according to the illumination feedback signal (A), wherein a duty cycle of the illumination control pulse signal varies with time, according to a dynamic/instant feedback signal (A), within a predetermined range; and

a DC/DC, buck, converter (D1, 30, 32), coupled to the illumination control pulse-generating unit (34) for driving the diodes (24) according to the illumination control pulse signal (A), wherein a phase shift, a frequency and a duty cycle of the illumination

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control pulse signal vary with time simultaneously within a predetermined range (Figs. 9 and 10).

Allowable Subject Matter

9. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, and based upon the 112 rejection as note above but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims with clarification regarding the 112 rejection.

10. The following is a statement of reasons for the indication of allowable subject matter: the prior fails to the illumination control pulse-generating unit further comprises a noise generator, for generating an analogue adder, coupled to the noise generator for a noise signal, receiving the illumination-adjusting signal and the noise signal to produce a noise adjusting signal, and signal loaded illumination and a comparator, coupled to the analogue adder for comparing the noise signal loaded illumination adjusting signal with a triangle wave as required in claim 2.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyet Vo whose telephone number is 571 272 1830. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571 272 1834. The fax phone numbers for the organization where this application or proceeding is assigned are 571 273 8300 for regular

communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272 2800.

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Information regarding the status of an application or status information for publicizing/unpublicizing applications may be obtained from the Patent Application Information Retrieval (PAIR) system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the PAIR system, contact the Electronic Business Center (EBC) at toll free 866-217-9197.


Tuyet Vo

Primary Examiner

May 16, 2006

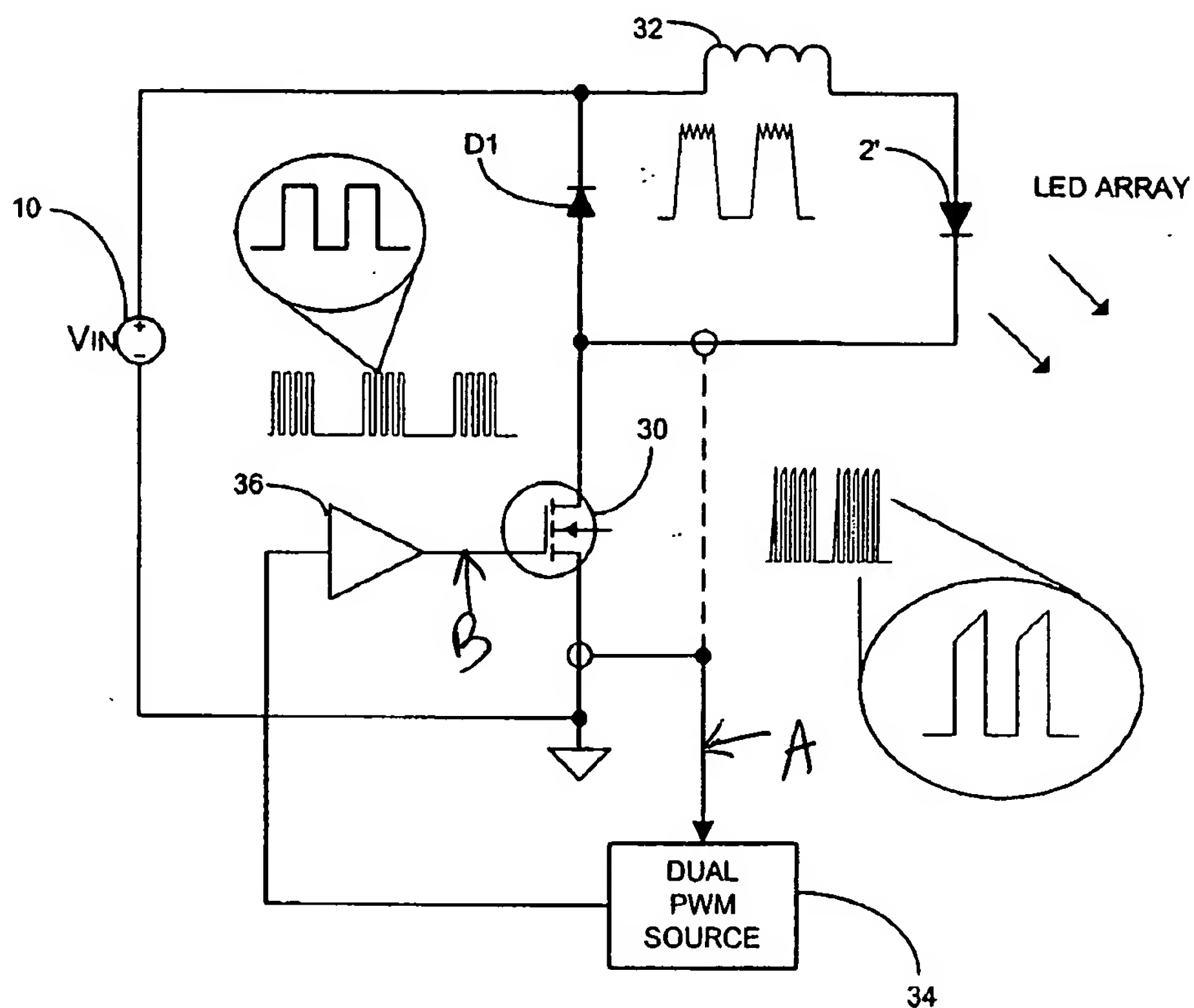


FIG. 7

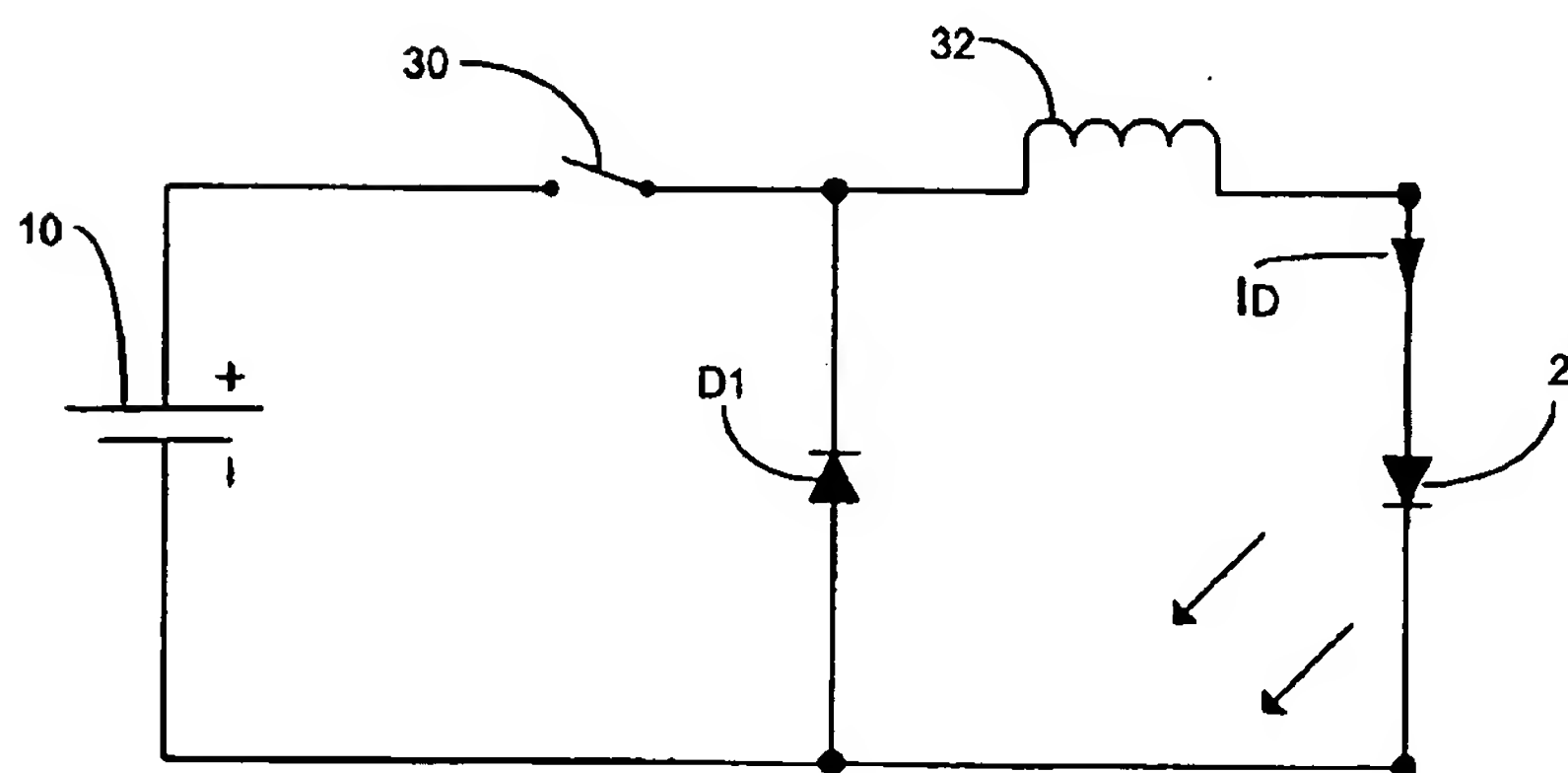


FIG. 8